

THOMPSON & KNIGHT LLP

TO: File

FROM: Elizabeth Webb **EXT:** 6147

DATE: April 20, 2005

SUBJECT: Meeting with EPA and Jackie Hardee of the TCEQ
April 1, 2005
Region 6, Dallas, Texas

Meeting Attendees

EPA:	The Dow Chemical Company	Pastor, Behling & Wheeler
Sam Coleman	Steve Kilpatrick	(Consultant for Dow and Chromalloy)
Barbara Nann	James C. Morriss III (Outside Counsel-	Eric Pastor
Gary Miller	Thompson & Knight)	
Courtney Kudla	Elizabeth Webb (Outside Counsel-	
John Hepola	Thompson & Knight)	
Chuck Sheehan	Scott Magelssen (by conference telephone)	
Larry Starfield		

TCEQ:	Chromalloy American Corporation
Jackie Hardee	Brent Murray
	Bill Mahley (Outside Counsel-
	Strasburger & Price)

I. Conceptual Site Model and Data Needs Table

The meeting was opened with Eric Pastor presenting the Conceptual Site Model and Data Needs Table (Attached). Jackie Hardee and Sam Coleman asked about certain assumptions regarding the Model (e.g. what evidence did we have that the cap over the surface impoundments maintains structural integrity?) Eric noted that field inspections provided the basis for the cap analysis. In presenting the Data Needs Table, Eric explained that most of the pre-investigation data review has already been completed. The existing data has been reviewed and compared to screening levels.

(At this point, Larry Starfield joined the meeting and the technical discussion was postponed until later in the meeting. As set out in Item II. below, the parties moved into discussions regarding the overall approach for conducting the site investigation and remedy.)

II. Sate Involvement/VCP

Jim Morriss outlined Mayor Greene's charge to the parties expressed in our prior meeting on March 7, 2005. Mayor Greene directed the parties to provide an outline of the key terms of an AOC with EPA that would provide for EPA's return of the Site to the State VCP. This approach would thereby accomplish both the parties' and EPA's mutual goals. Larry Starfield stated Mayor Greene, Regional Administrator, believes that getting the Site to the VCP is a good thing, and explained that there were two ways to accomplish this task. The two options are:

1. (Described as the "straight forward" approach)-- Enter into an AOC with EPA to conduct the work at the Site. After the work is completed under EPA oversight, EPA would delist the Site from the NPL. Next, the Site goes to the State, and the State does a VCP walk-over and gives the parties a Certificate of Completion.

Jackie Hardee pointed out that this approach runs "a foul" of the VCP, because once remedial action is undertaken, the Site is no longer eligible to enter the VCP and receive a Certificate of Completion.

2. Larry Starfield pointed out that EPA cannot say that traditional VCP standards apply to an NPL site. However, the parties could enter into an AOC with EPA whereby the parties would agree to undertake certain tasks to complete an initial removal action and a site investigation within the State VCP. The scopes of work for these actions would be approved by EPA in the AOC, and then the Site could be entered into the State VCP for the investigation and cleanup. This approach involves the EPA and TCEQ working in tandem—EPA would make sure the scopes of work for the removal action and site investigation meet its requirements, the scopes would be attached to the AOC, and then the Site would go to the State VCP for investigation and cleanup under State oversight. Larry Starfield stated that under this approach, the scopes of work and AOC satisfy two purposes.

In response to a question for clarification from Brent Murray, Sam Coleman explained that as long as the EPA had an AOC with the parties with EPA-approved removal and investigation scopes of work attached, EPA had no problem with State oversight. Sam did not foresee a need for dual oversight. The State would take the oversight role on the investigation and cleanup. After the investigation and cleanup were completed under the State VCP, EPA would have to verify that the work, as set out in the approved scopes of work, had been completed.

Jackie Hardee stated that she would need a letter from EPA stating that the Site can go into the VCP. Jim Morriss also raised the need to make an exception to the Memorandum of Agreement ("MOA") to allow the Site into the VCP. Larry Starfield, in response to these comments, said that this issue is an internal EPA matter that is being addressed, and we should just trust that EPA will find a way to make this happen. We can bridge the different standards through agreement on the scopes of work in the AOC. How the exception to the MOA will be handled will be left to Larry, Sam, the Region and Headquarters.

The first step is to come up with the work plans while working on the AOC and then meld them together. Jackie Hardee commented that we could attach the approved AOC with the attached scopes of work to the VCP application. Sam emphasized that the scope of work is the biggest hurdle. Once EPA is satisfied with the scope of work, they will back out and let the State handle the matter.

The steps in the Option 2 process were outlined as follows:

1. Scope of Work and AOC (work will proceed on these at the same time). EPA will work out the language that goes in the AOC, or another piece of paper, to address the MOA issue.
2. File VCP Application. The AOC will be attached to the VCP application.
3. Full implementation of SOW within the VCP
4. Submit APAR
5. Implement RAP.

With regard to the Scopes of Work, the parties should work with Gary Miller of EPA in preparing them. Jackie Hardee said that the VCP program does not need to approve or even review any of the Scopes of Work. She said just to follow the VCP guidance and the VCP will be happy. With regard to the review of deliverables within the VCP, Jackie said that the VCP won't expedite more than the standard 45 days.

Sam Coleman explained that the AOC with EPA will require the parties to submit the final report to EPA (format of report will be reviewed with EPA) after the work in the VCP has been completed. EPA will evaluate the report to make sure that the requirements in the previously approved scopes of work have been met. If all is in order, EPA will delist the Site from the NPL.

Another issue discussed with regard to delisting concerned on-going monitoring. Even if the Site receives a conditional certificate from the VPC, Sam was not sure that the Site could be delisted as long as there is on-going monitoring. We noted that EPA could delist on the basis that no Federal funds would be required, but Sam did not want to commit, at this time, to delisting on this basis.

(Larry Starfield left the meeting at this point, and the parties resumed the technical discussions they started at the beginning of the meeting.)

III. Further Discussion Regarding the Conceptual Site Model and the Outlines for the Removal Action and Investigation Scopes of Work

With regard to the Scopes of Work, Sam stressed that we should make sure we meet 100% of the State requirements. Because there will be a dual level of analysis upfront, we should make sure we meet both (EPA's and the State's requirements?—meaning unclear).

With regard to the incomplete pathways shown in the Conceptual Site Model, we will need to provide very specific documentation to verify the incomplete pathways.

EPA may want more sampling locations than are currently shown in the investigation outline. Jackie Hardee pointed out that the sampling locations in the Site Screening Investigation (“SSI”) are just a beginning point. The objectives of the SSI are different from a site investigation. Sam also stated that we will have to start with TRIAD. The Ecological work was also discussed. With regard to the Removal Action, Sam and Jackie Hardee agreed with the approach.

IV. Public Participation

Sam Coleman commented that he wants public participation requirements addressed in the scopes of work for the removal action and investigation. He wants to see something about the communication plan. Sam mentioned informing the community of the following:

- what will be done as part of the removal action;
- what will be done as part of the Site investigation;
- the response actions that will be conducted; and
- when we have finished the response actions.

We explained that the parties have already prepared a Fact Sheet for the Site, and want to keep the community updated.

Gary Miller commented that he would address Item 6 on EPA’s agenda (“Assurance that Response is Consistent with other NPL Actions”) in the Scope of Work. He said the parties may not think this item is necessary, but EPA needs it for delisting.

V. Assignment of Tasks

Gary Miller and Eric Pastor will set a date to meet to talk about the removal and investigation scopes of work.

Chuck Sheehan and Barbara Nann will review the outline of key terms that we previously sent to them and will work on a draft of the AOC.

cc: Mr. Zak Covar, Office of the Governor (via Electronic Mail)

**AGENDA: Investigation and Cleanup of Gulfco Superfund Site
4/1/05 Meeting**

- I. Welcome
- II. Appropriate State Involvement/Mechanism for Entry into State VCP
- III. Purpose of Meeting: *Investigation and Cleanup of Gulfco Superfund Site*
- III. EPA Oversight of Investigation and Cleanup
- IV. Appropriate Public Participation (i.e. notice and comment, public meetings, and administrative record)
- V. Mechanism to Assure that all Appropriate Response Actions are Taken
- VI. Assurance that Response is Consistent with other NPL Actions
- VII. Work Plan
 - A. Soil
 - B. Groundwater
 - C. Surface Water
 - D. Sediment
 - E. Fish Samples
- VIII. Next Steps

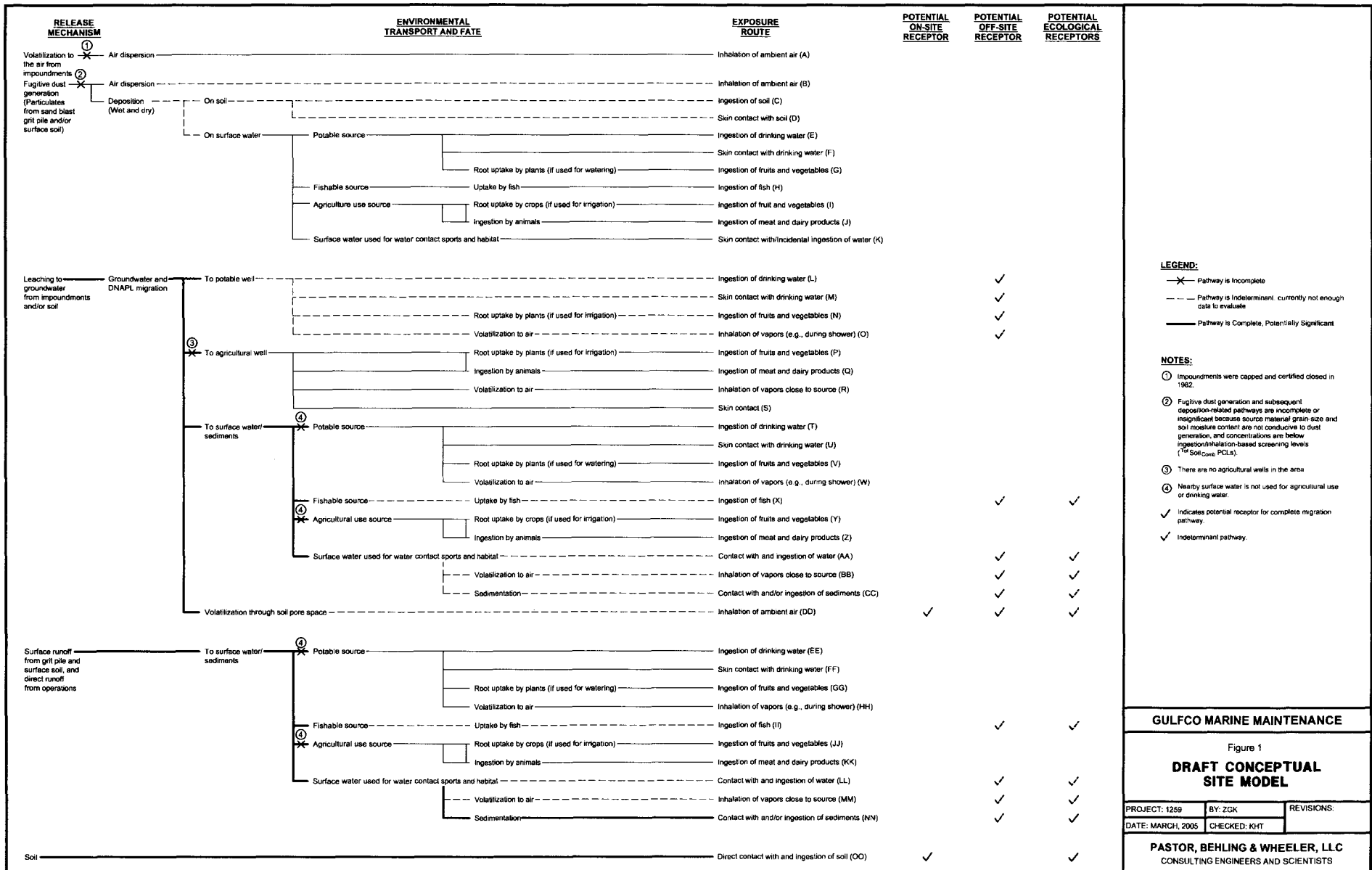


TABLE 1
GULFCO MARINE MAINTENANCE
PRELIMINARY DATA NEEDS EVALUATION

CONCEPTUAL SITE MODEL EXPOSURE ROUTE ¹	DATA NEED	APPROACH TO FILL DATA NEED	
		PRE-INVESTIGATION	INVESTIGATION
L through O	Groundwater/DNAPL migration pathway to wells	Water well information; stratigraphic data regarding confining layer, gradient and direction, TDS concentration.	Investigate potential for DNAPL presence. Install additional monitoring wells and sample for COCs. Evaluate water-bearing unit classification (collect TDS data, estimate yield). Perform field water well inventory.
X	Groundwater conditions adjacent to Intracoastal Waterway	Evaluate existing groundwater data as it relates to point of discharge. Compare to screening criteria.	Complete additional wells adjacent to Intracoastal Waterway and collect samples for analysis.
AA through CC	Groundwater conditions adjacent to Intracoastal Waterway	Evaluate existing groundwater data as it relates to point of discharge (flow directions, COC concentrations). Compare to screening criteria.	Complete additional wells adjacent to Intracoastal Waterway and collect samples for analysis.
DD	Groundwater characterization in potential source areas.	Evaluate groundwater data and compare to screening criteria.	Collect additional groundwater data in impoundment and tank farm areas and compare to screening criteria (^{Air} GW _{Inh-V} PCL).
II	Potential chemical of concern (COC) concentration in runoff and existing sediment data.	Evaluate surface soil data for data quality and compare against screening levels. Evaluate sediment data for data quality, and documentation of collection method/depth interval analyzed.	Characterization of surface soils and existing sediments.
LL and MM	COC concentrations in surface water.	Evaluate existing surface water data.	Assess potential need for these data through evaluation of data for potential transport media, i.e., surface soils and sediment.

TABLE 1
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PRELIMINARY DATA NEEDS EVALUATION

CONCEPTUAL SITE MODEL EXPOSURE ROUTE ¹	DATA NEED	APPROACH TO FILL DATA NEED	
		PRE-INVESTIGATION	INVESTIGATION
NN	COC concentrations in sediment.	Evaluate surface soil data for data quality and compare against screening levels. Evaluate sediment data for data quality, and documentation of collection method/depth interval analyzed.	Characterization of existing sediments.
OO	COC concentrations in soil and sand blast grit.	Evaluate data quality. Compare existing data to screening levels.	Characterize surface soil and sand blast grit in areas of screening level exceedences to evaluate lateral extent and depth. Collect soil properties data to facilitate development of TRRP Tier 2 PCLs.
Remedy Data Need	Sand blast waste disposal classification.	Summarize existing sand blast data relative to waste classification (Subchapter R) requirements.	Collect additional waste characterization data, if needed to facilitate waste classification (30 TAC Subchapter R) requirements.

Notes:

- 1 See Figure 1 (Conceptual Site Model) for Exposure Route description.
- 2 * Indicates provisional investigation data collection effort pending findings of pre-investigation evaluation.

TABLE 2
GULFCO MARINE MAINTENANCE
DRAFT INVESTIGATION WORK PLAN OUTLINE

DATA NEED	INVESTIGATION ACTIVITY	SAMPLING LOCATIONS	SAMPLING METHODS	SAMPLE ANALYTES
Safety procedures to be followed during investigation activities.	Prepare Site-specific Health and Safety Plan.	To be specified in HSP.	To be specified in HSP. Likely to include organic vapor monitoring during intrusive activities.	To be specified in HSP. Likely to include total organic vapor field measurements.
Groundwater/DNAPL migration pathway to wells.	Investigate potential for DNAPL presence.	Four monitoring wells near perimeter of former surface impoundments and one monitoring well near former AST tank farm (Figure 3).	Monitoring wells screened to base of uppermost water bearing unit. Samples collected using slow purge sampling methods. Perform water level measurements to assess gradient and flow direction. Use interface probe/bailer to evaluate potential presence of DNAPL.	Volatile organic compounds (VOCs) and semi-volatile organics.
	Evaluate water-bearing unit classification (collect TDS data, estimate yield).	At least one upgradient /background monitoring well (assume at least one well installed for other data needs will meet this criteria).	Groundwater samples collected using slow purge sampling methods. Aquifer testing using slug out procedures.	Total dissolved solids (TDS), general chemistry (major anions/cations / alkalinity).
	Perform field water well inventory to confirm record review.	None – field survey of nearby well locations, completion information and usage.		

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DATA NEED	INVESTIGATION ACTIVITY	SAMPLING LOCATIONS	SAMPLING METHODS	SAMPLE ANALYTES
Groundwater conditions adjacent to Intracoastal Waterway.	Complete additional wells adjacent to Intracoastal Waterway and collect samples for analysis.	Install two monitoring wells between Marlin Ave. and Intracoastal Waterway (Figure 3), in addition to well near former AST tank farm. Install staff gauge at waterway to allow water level measurement comparison with monitoring wells.	Monitoring wells screened to base of uppermost water bearing unit. Samples collected using slow purge sampling methods. Measure water levels to assess gradient and flow direction.	VOCs, semi-volatile organics, metals, TDS.
Groundwater characterization in potential source areas.	Collect groundwater data in impoundment and tank farm and compare to screening criteria ($^{Air}GW_{Inh-V}$ PCL).	Sample wells installed in former impoundment and tank farm areas.	Samples collected using slow purge sampling methods.	VOCs.
Potential chemical of concern (COC) concentration in runoff and existing sediment data.	Characterize surface soils, in potential source areas, with regard to contaminant concentrations (relative to preliminary screening criteria) and runoff potential.	Collect surface soils samples in vicinity of former sand blast and dry dock areas, including sample of sand blast grit (total of twelve locations) (Figure 4).	Hand auger (0 to 2 ft.) soil sampling and grab sampling of sandblast grit material.	Metals (all locations), VOCs and polycyclic aromatic hydrocarbons (PAHs) (selected locations based on existing data).

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DRAFT INVESTIGATION WORK PLAN OUTLINE

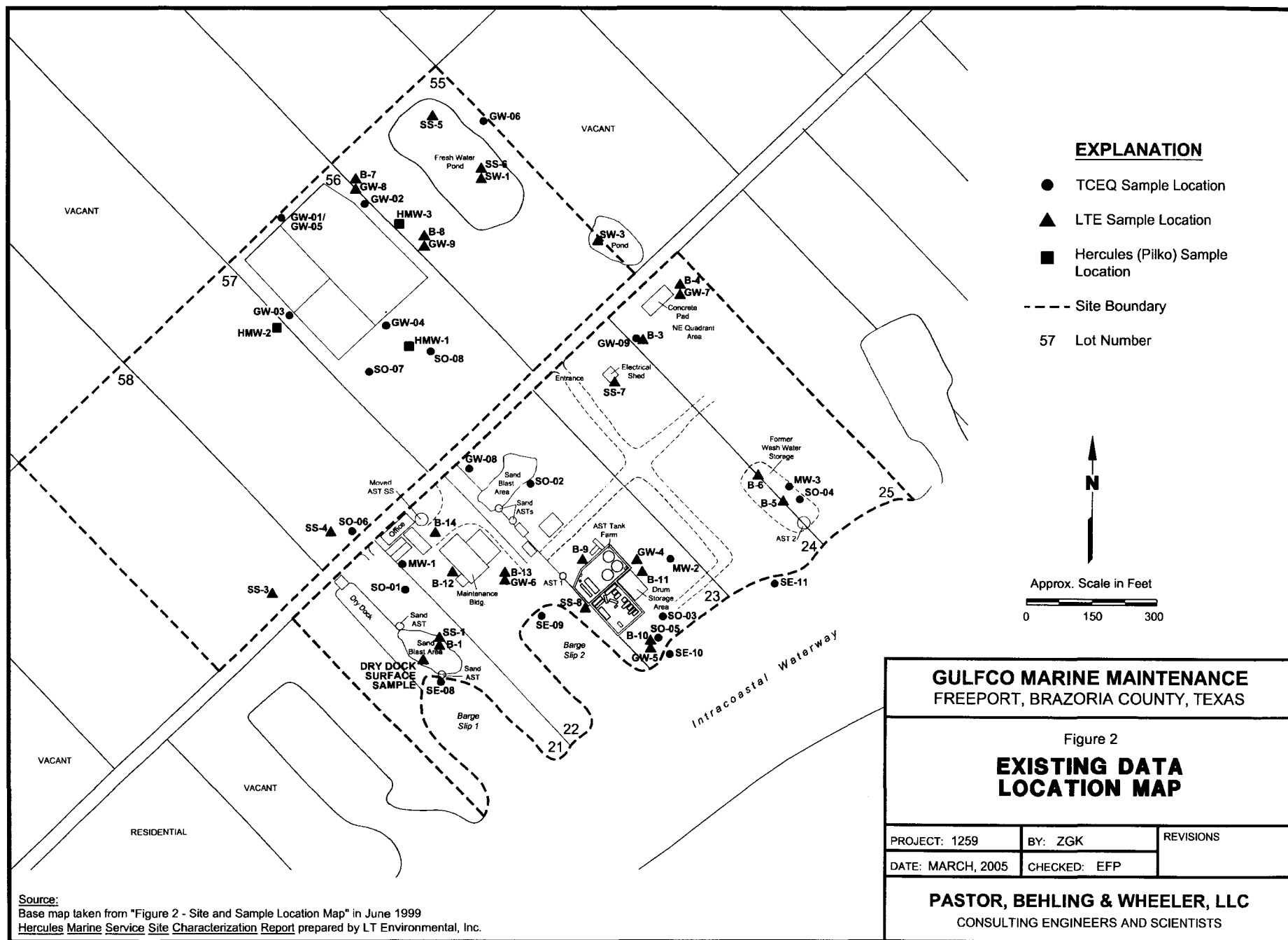
DATA NEED	INVESTIGATION ACTIVITY	SAMPLING LOCATIONS	SAMPLING METHODS	SAMPLE ANALYTES
	Characterize sediments with regard to contaminant concentrations (relative to preliminary screening criteria), evaluate lateral extent and vertical distribution as appropriate based on initial analyses.	Collect sediment samples at six locations in barge slips vicinity (Figure 5).	Collect sediment cores (anticipated depth of 3 feet) using piston coring system. Initially analyze surface depth interval. Analyze deeper depth intervals if warranted based on initial data	Metals and PAHs.
COC concentrations in surface water.	Assess potential need for these data through evaluation of investigation data for potential transport media, i.e., surface soils and sediment.	Develop sampling details once data need is established.	To be determined.	To be determined.
COC concentrations in sediment.	Characterize sediments with regard to contaminant concentrations (relative to preliminary screening criteria), evaluate lateral extent and vertical distribution as appropriate based on initial analyses.	Collect sediment samples at six locations in barge slips vicinity.	Collect sediment cores (anticipated depth of 3 feet) using piston coring system. Initially analyze surface depth interval. Analyze deeper depth intervals if warranted based on initial data	Metals and PAHs.

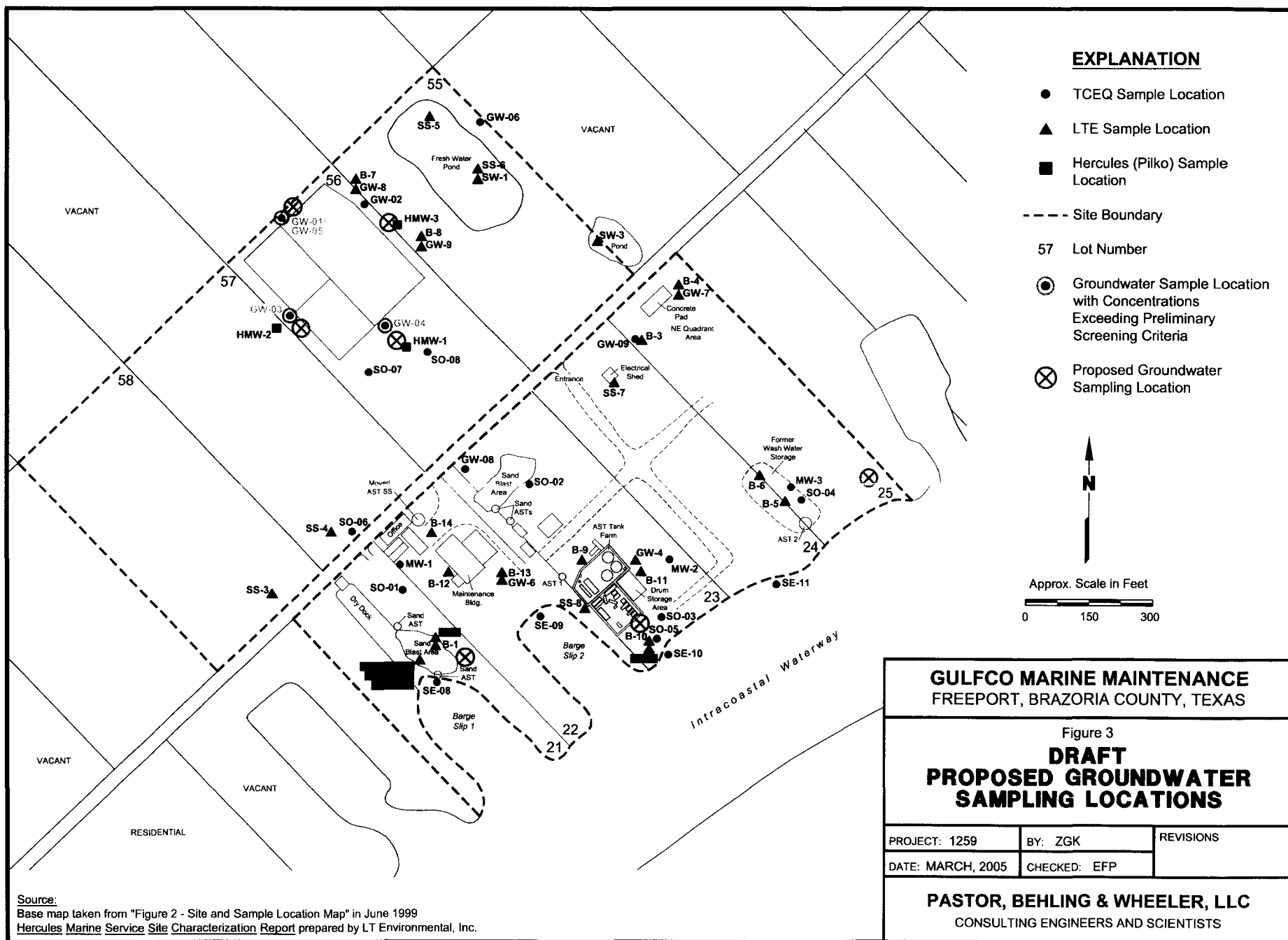
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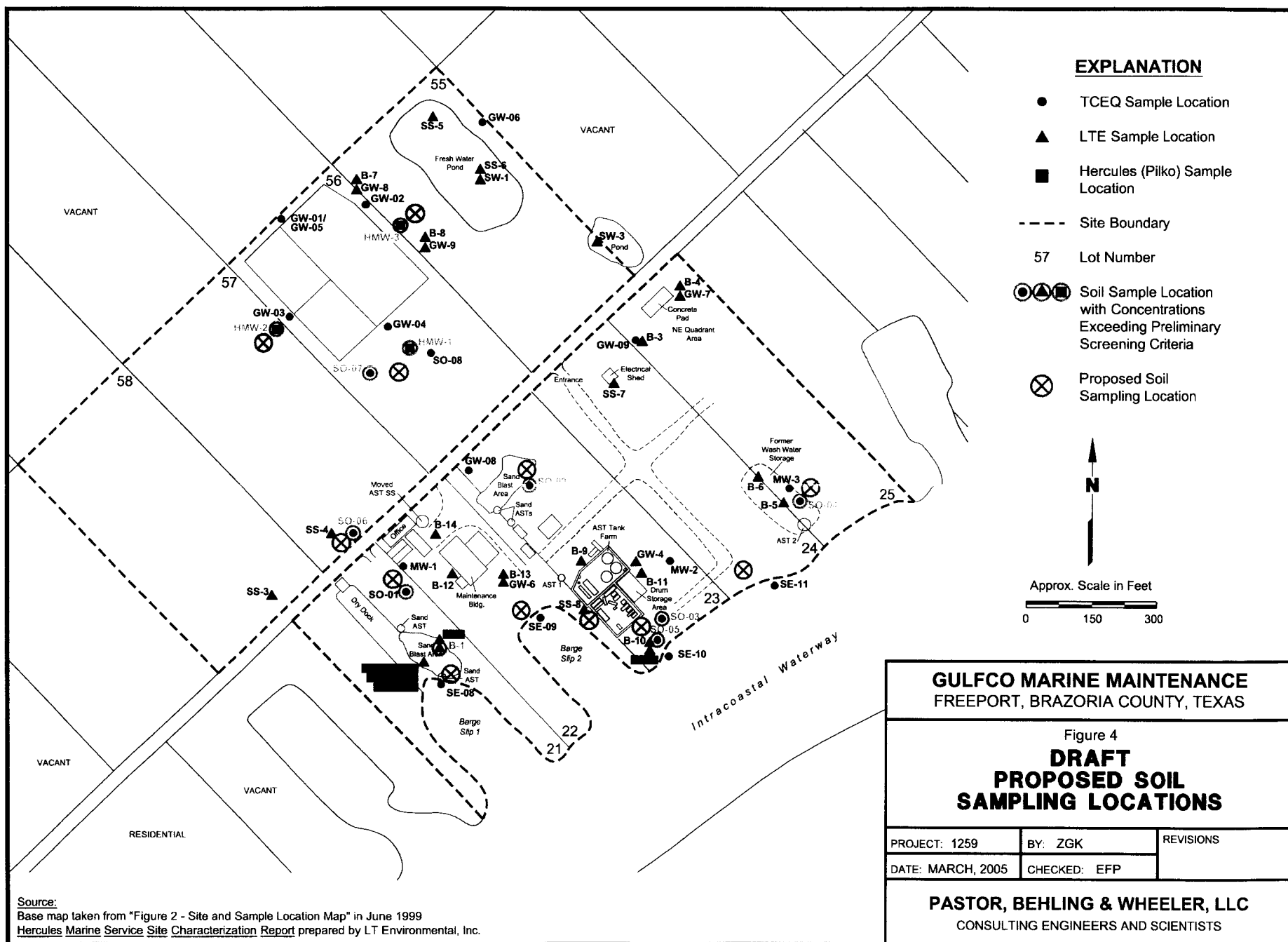
DATA NEED	INVESTIGATION ACTIVITY	SAMPLING LOCATIONS	SAMPLING METHODS	SAMPLE ANALYTES
COC concentrations in soil and sand blast grit.	Characterize soil and sand blast grit in areas of screening level exceedences to evaluate lateral extent and depth. Collect soil properties data to facilitate development of TRRP Tier 2 PCLs.	Collect surface soils samples in vicinity of former sand blast and dry dock areas, including sample of sand blast grit (total of twelve locations) (Figure 4). Collect deeper samples if needed (potentially from approx. depth of 5 ft. in vicinity of locations HMW-1, -2, and -3).	Hand auger (0 to 2 ft.) soil sampling and grab sampling of sandblast grit material. Deeper samples, if needed, to be collected using direct push or hollow stem auger.	Metals (all locations), VOCs and PAHs (selected locations based on existing data). Soil bulk density, pH and porosity data to be collected for selected samples to facilitate development of TRRP Tier 2 PCLs.
Sand blast grit disposal classification.	Collect additional waste characterization data, if needed to facilitate waste classification (30 TAC Subchapter R) requirements.	Two samples (one of each grit stockpile area), if needed.	Composite grab sample, if needed.	To be determined.

Notes:

- (1) All chemical analyses of solids (soil, sediment) to be reported on a dry-weight basis.
- (2) The number and locations of sampling points are subject to modification as needed based on field conditions and accessibility considerations.







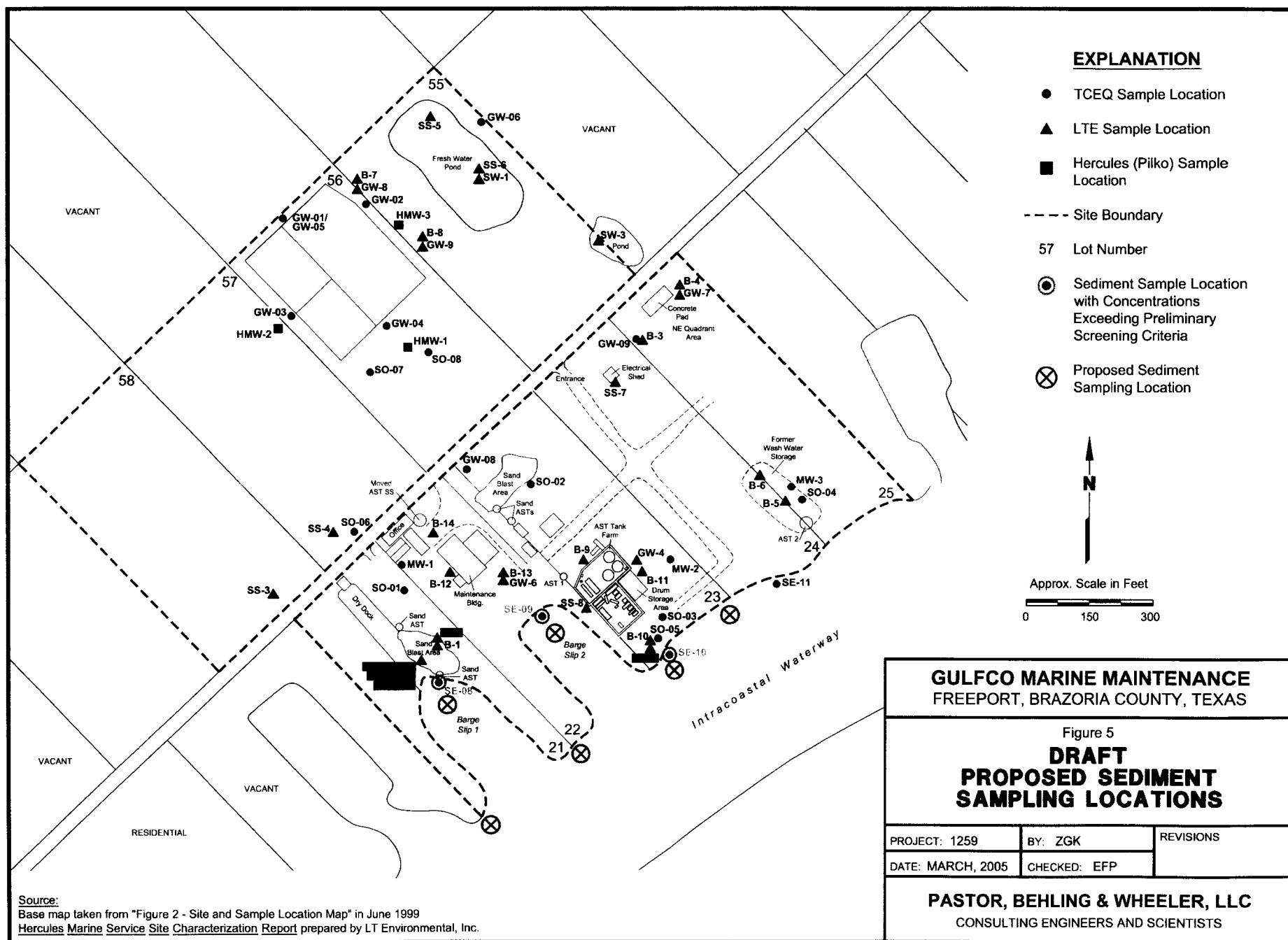


TABLE 3
GULFCO MARINE MAINTENANCE
DRAFT REMOVAL ACTION WORK PLAN OUTLINE

REMOVAL ACTION OBJECTIVE	REMOVAL ACTION ACTIVITY	CONTRACTOR BID ITEM
Zero OSHA recordable injuries during on-site work	Prepare Site-specific Health and Safety Plan.	Prepare Site-specific Health and Safety Plan.
Remove AST Contents	Sample, characterize and dispose AST contents (liquid and sludge).	Liquid characterization; Liquid disposal; Sludge characterization; Sludge disposal Proposed disposal facility
Remove ASTs	Disassemble and demolish or remove/decontaminate tanks.	Disassemble tanks; Demolish tanks and provide certificate of demolition; Remove tanks, decontaminate and provide documentation of decontamination.
Remove accumulated rainwater within tank farm berms	Sample, characterize and manage liquid accumulated within bermed area.	Liquid characterization; Liquid management; Proposed management method
Prevent future rainwater accumulation in tank farm bermed area.	Destroy/demolish tank farm berms as needed to prevent rainwater accumulation.	Berm destruction/demolition
Secure part of Site south of Marlin Avenue	Repair/re-construct fence as needed to prevent land access to part of Site south of Marlin Avenue.	Fence repair reconstruction.
Document removal action	Prepare removal action documentation report.	Prepare removal action documentation report.